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OUTPUT OF TIMBER PRODUCTS IN IDAHO, 1962

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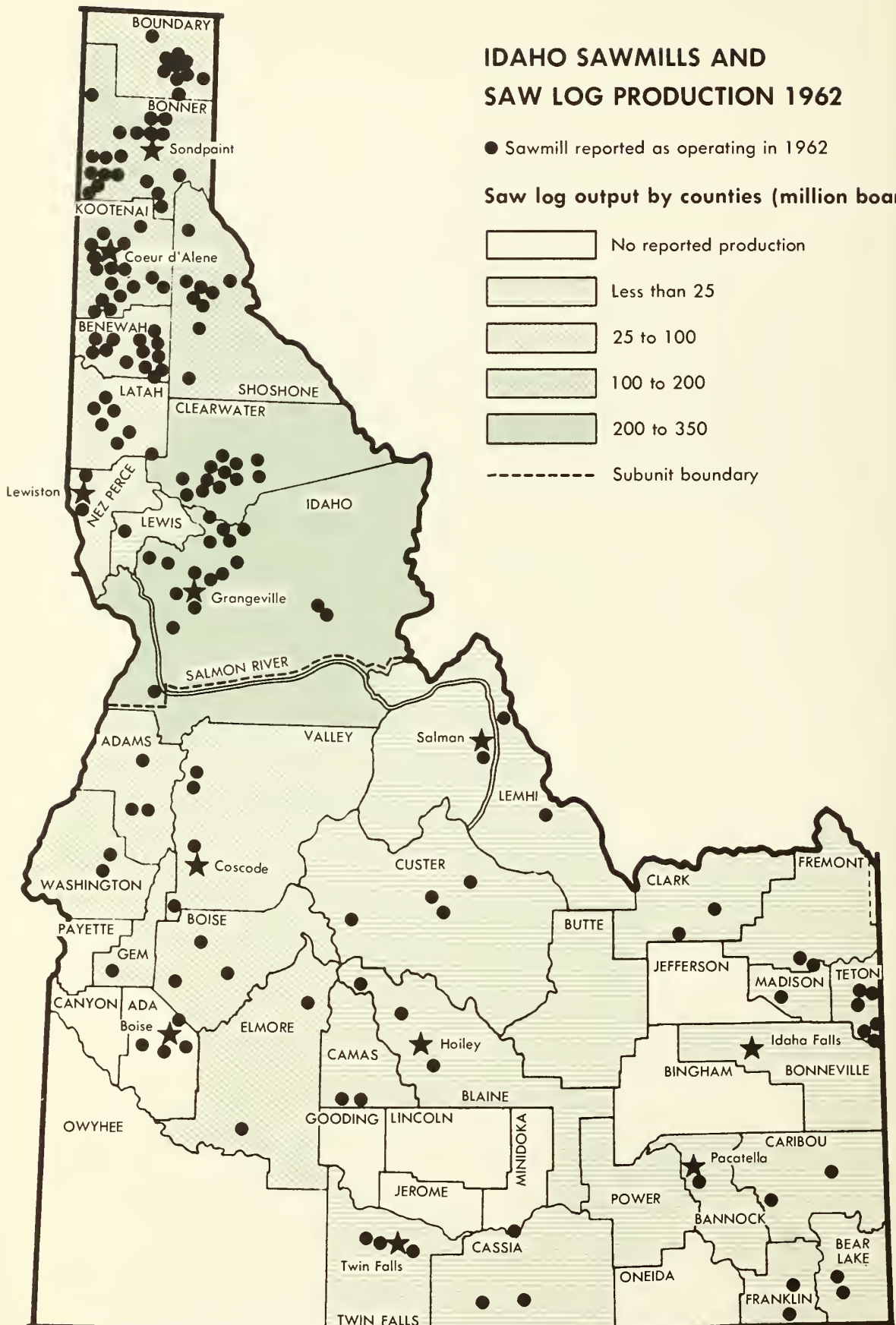
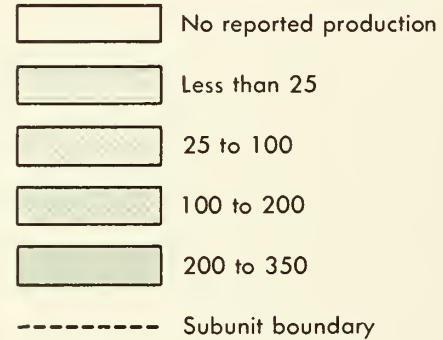
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AL REWARD

IDAHO SAWMILLS AND SAW LOG PRODUCTION 1962

● Sawmill reported as operating in 1962

Saw log output by counties (million board feet)



U.S. Forest Service
Research Paper INT-13
1964

OUTPUT OF TIMBER PRODUCTS IN IDAHO, 1962

By

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This report summarizes survey information collected in 1963 about the output of roundwood products from Idaho's forests in 1962. The term "roundwood" designates products that were received at plants "in the round" (as logs or bolts) for the first steps in manufacture. Accordingly, the data presented here do not include pulpwood made from sawmill or veneer plant residues (slabs, edgings, trim ends, shavings, sawdust, lathe cores) nor do they include fuelwood or any other items (industrial or domestic) made from these residues. However, to evaluate the extent to which sawed materials compete with round timbers in mine use, data on sawed materials used in mines in 1962 are summarized in one table in this report, but are not included elsewhere.

The detailed results of this survey are presented in a series of tables. The highlights of 1962 production and major production trends between 1952 and 1962 are discussed. Data for saw log output are presented in more detail than for other products because of the predominance of saw logs in the State's total production.

Forest products surveys in the Rocky Mountain States and western South Dakota are part of the Intermountain Forest and Range Experiment Station's program for periodic appraisals of the forest situation. In western South Dakota, eastern Wyoming, Colorado, New Mexico, and Arizona, products surveys and other phases of Forest Survey work are conducted cooperatively with the Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado.

THE AUTHOR

ALVIN K. WILSON is in charge of the products and timber cut phase of the Forest Survey at Intermountain Forest and Range Experiment Station. After working in Forest Survey at the Northeastern Forest Experiment Station, he transferred to forest management research at Intermountain Station in 1949, returning to forest survey work in 1957. He is the author of some 30 publications on forest management and forest economics subjects.

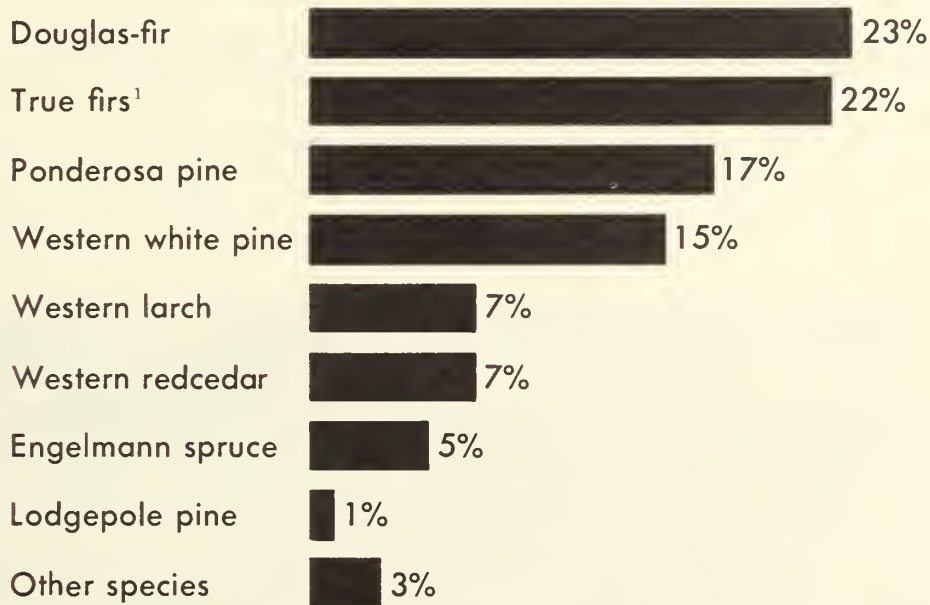
OUTPUT OF TIMBER PRODUCTS IN IDAHO, 1962

THE SITUATION IN 1962

The output of roundwood products originating in Idaho in 1962 totaled 249 million cubic feet. These products included saw logs (for lumber), veneer logs, pulpwood logs, commercial poles, mine timbers, miscellaneous industrial wood (principally house logs, shingle logs and bolts, and specialty logs), posts, fuelwood, and farm timbers.

Nearly two-thirds of the total output came from public lands; National Forests supplied 48 percent, and other public lands 14 percent of the total. Private lands contributed the remaining 38 percent, two-thirds of which came from forest industry lands.¹ The leading species were Douglas-fir, the true firs, ponderosa pine, and white pine.

Idaho Timber Products Output by Species, 1962



¹Grand, white and subalpine firs.

Saw logs accounted for 94 percent of the total roundwood cut and amounted to 1,547 million board feet.² Of this, 1,510 million board feet went to mills in Idaho. Geographically, the largest concentration of sawmills and the highest saw log output is in northern Idaho (see inside front cover). In addition to the mills shown there were an estimated 24 small active sawmills for which saw log reports were not received in the 1962 products survey. These mills received about 1.9 percent of the State's saw log output. The remaining 37 million board feet was shipped to mills in Washington, Montana, Utah, and Wyoming; however, some 49 million board feet of saw logs were imported from Washington, Montana, and Wyoming. Public lands provided more than 58 percent of all saw logs.

¹Lands owned by companies or individuals operating wood-using plants.

²International $\frac{1}{4}$ -inch log rule is used throughout this report.

Round pulpwood output in 1962, totaling 66,200 cords, was the lowest of the 1952-1962 period. Even so, in terms of volume, it was the State's second most important roundwood product.

Veneer log production in 1962, at 19 million board feet, was the highest on record for Idaho. Four veneer and plywood plants were in operation in 1962; as recently as 1960 only two were operating. Western white pine and western larch were the leading species used for veneer.

Commercial poles produced in 1962 totaled almost 150,000 and had a combined volume of nearly 2.7 million cubic feet. These were predominantly western redcedar but substantial numbers were made from lodgepole pine and western larch.

Other roundwood products (round mine timbers, miscellaneous industrial wood, posts, fuelwood, and miscellaneous farm timbers) totaled some 3.7 million cubic feet. Almost two-thirds of this volume was in miscellaneous farm timbers. More than three-fourths of the round mine timbers and 90 percent of the sawed mine materials used in the State were used in northern Idaho.

TRENDS SINCE 1952

Production figures including the output of all roundwood products in Idaho are available for only 3 years--1952, 1956, and 1962. Roundwood output for these years was:

	<u>Million cubic feet</u>
1952	242
1956	328
1962	249

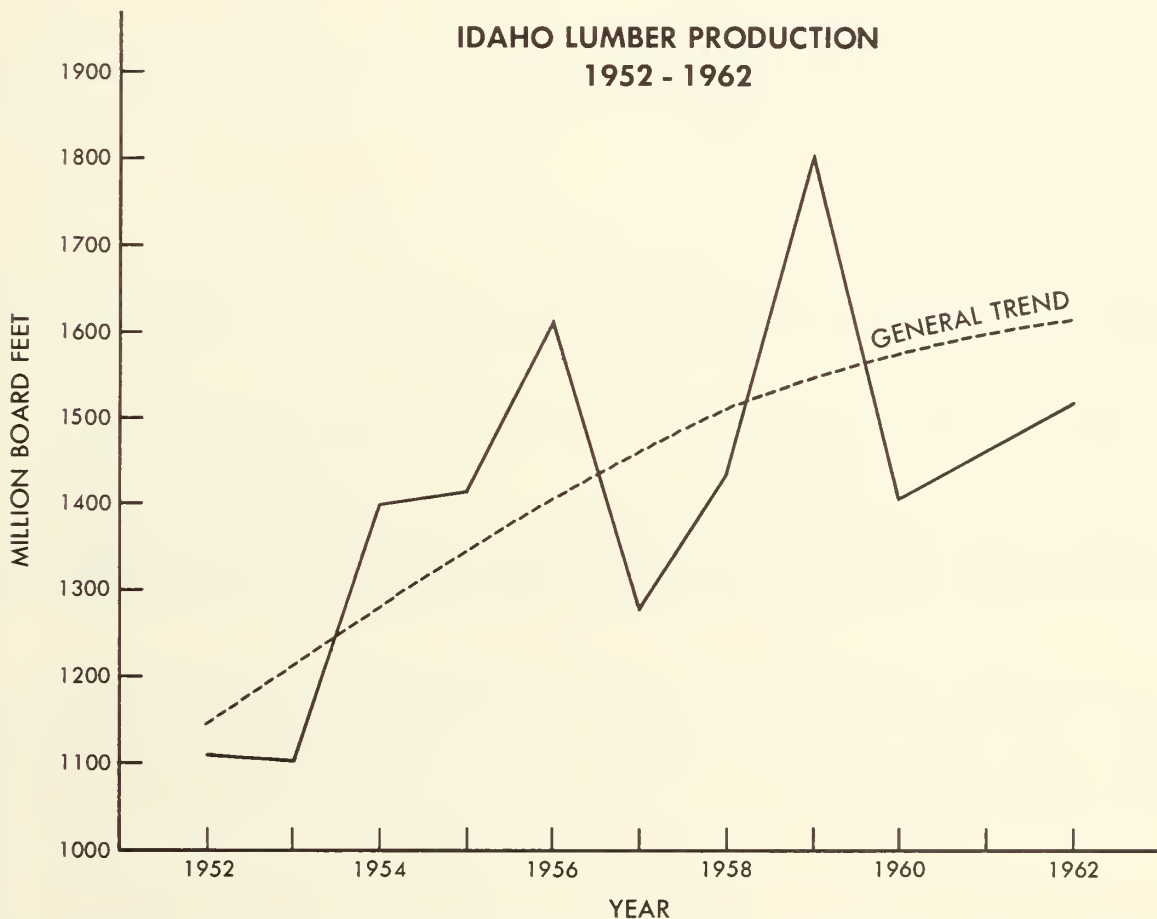


Potlatch Forests, Inc., Lewiston, utilizes several roundwood products in integrated operations--saw logs for lumber, pulp logs for pulp, and veneer logs for plywood.

Photo: Western Ways, Inc., Corvallis, Oregon

These figures show a net increase of only 3 percent in total roundwood output from 1952 to 1962. Because they do not provide year-to-year continuity, these data have only limited value in estimating the general production trend during the period 1952-1962.

There is, however, a means of estimating the production trend. Lumber production data are available from the Census Bureau for each year, and saw logs for lumber account for most of the roundwood output.³ These data indicate that the general trend has been continuously, if unsteadily, upward since 1952. The average annual increase in lumber production between 1952 and 1962 was 4.4 percent.



Only about two-thirds as many sawmills were operating in 1962 as had been operating in 1956, but the production of the average mill was higher in 1962. The 311 sawmills that operated in 1956 produced an average of 5.2 million board feet of lumber per mill; the 193 mills that were active in 1962 averaged 7.9 million board feet. Despite the substantial decrease in the number of active mills, total production was only 6 percent less in 1962 than in 1956. Comparisons in more detail are made below:

³In 1952, saw logs for lumber comprised 74 percent of total output; this percentage rose to 84 by 1956, and was 94 in 1962.

Number of mills by production class and their average lumber output in
1956 and 1962

Production class (bd. ft. per year)	Year	Active sawmills	Average annual production	Percent of total lumber production
		Number	MM bd. ft.	
10 million and over	1956	37	31.5	73
	1962	42	28.2	78
1 to 10 million	1956	108	3.8	25
	1962	81	3.8	20
Less than 1 million	1956	166	.2	2
	1962	70	.4	2

Although a few mills increased their production so that by 1962 they had moved from the middle to the largest production class, it is apparent that many mills that were in the middle and lower production classes in 1956 had suspended operations by 1962.

Veneer log production, while still accounting for only a minor part of the State's roundwood output, more than doubled from 1952 to 1962. Production of round pulpwood, however, showed a different trend during the 10-year period. Output in 1952 totaled nearly 156,000 cords and increased to an estimated peak of about 230,000 cords around 1956, but by 1962 had declined to less than 70,000 cords. Although pulp production has increased in the northern Idaho-eastern Washington area, the increasing use of chipped sawmill residues for pulp manufacture has led to general reductions in demand for round pulpwood in the State.

The combined output of all other roundwood products declined 83 percent between 1956 and 1962 due largely to the reduced production of commercial poles, fuelwood, and round mine timbers. The decline in output of these products had a substantial effect on the total output for 1956 and 1962. Estimated outputs for posts and miscellaneous farm timbers were somewhat higher in 1962 than in 1956.

The decline in commercial pole production during recent years follows the general pattern observed throughout the northern Rocky Mountains.⁴ Following the peak output of 1947, pole production dropped off rapidly during the early 1950's but has been more or less stable since 1957.

Changes in mining methods and increased use of sawed timbers were among the factors causing the decline in round mine timber production. The decline in fuelwood consumption conforms to the national trend as indicated in Census Bureau statistics.⁵

⁴ Wilson, A. K. Commercial pole production in the Northern Rocky Mountain area in 1962. Intermountain Forest and Range Expt. Sta. Res. Note INT-9. 1963.

⁵ U.S. Bureau of the Census. U.S. Census of Agriculture: 1959, vol. II, General Report Statistics by Subjects, 1485 pp. Wash., D.C.: U.S. Govt. Printing Office. 1962.

SURVEY PROCEDURES

The survey of saw log receipts was based on a listing of sawmills prepared late in 1962, made as complete as possible through reviews by Forest Service personnel and the Idaho State Forester's office. Operators of all listed mills were contacted by mail to obtain reports of their saw log receipts in 1962. Also, all sawmills outside the State that were considered to be possible recipients of logs from Idaho were asked to report. Field sampling provided data for estimating, within acceptable error limits, the receipts of sawmill operators who did not furnish mail reports (nonrespondents).

The standard error for that part of the total which was estimated by field sampling was 11,050,000 board feet, or 0.71 percent of the total saw log receipts from Idaho timberlands. The odds are 2 to 1 that the true total for 1962 saw log receipts from Idaho was between 1,536,284,000 and 1,558,384,000 board feet.

Procedures for the survey of round mine timbers and sawed timbers and lumber received at Idaho mines in 1962 were similar. Mail contacts were made from lists of mine operators compiled from State sources⁶ and a mining industry directory.⁷ Nonrespondents were sampled by field contacts. Since none of the nonrespondents contacted in the field reported any receipts of round timbers, the estimate of the total (223,000 cubic feet) is considered to be without sampling error. For sawed timbers and lumber receipts, the standard error was 15.8 percent of the State total so that, at 2 to 1 odds, the true State total was between 17,667,000 and 24,291,000 board feet, lumber tally.

Reports were obtained by mail and field contacts were made with all plants known to receive veneer logs, round pulpwood, commercial poles, and miscellaneous industrial wood from Idaho in 1962; estimates for these products are considered to be without sampling error.

Estimates for 1962 production of posts, fuelwood, and miscellaneous farm timbers were derived from reports furnished by the National Forests, the Idaho State Forester, Bureau of Land Management, and the Bureau of Indian Affairs, supplemented by trend estimates obtained from U.S. Bureau of the Census publications for farm use of these products. Since this procedure precluded the computation of a sampling error by the methods used with the preceding products, no error estimate has been assigned.

⁶Idaho Bureau of Mines and Geology: 62nd Annual Report of the Mining Industry of Idaho for 1961, 147 pp.

⁷Miller Freeman Publications. Mining World Catalog Survey and Directory Number, 246 pp., 1962.

Table 1.--Output of timber products in Idaho by products and species groups in standard units, 1962

Product		Quantity		
		Total	Softwoods	Hardwoods
Saw logs	M bd. ft. ¹	1,547,334	1,546,858	476
Veneer logs	M bd. ft. ¹	19,030	18,750	280
Pulpwood (round)	M std. cds. ²	66	66	0
Fuelwood	M std. cds.	5	5	(³)
Poles	M pieces	150	150	0
Posts (round and split)	M pieces	818	818	0
Mine timbers (round)	M cu. ft.	223	223	0
Miscellaneous industrial wood ⁴	M cu. ft.	124	108	16
Miscellaneous farm timbers . .	M cu. ft.	2,302	2,302	0
All products--converted to . .	M cu. ft.	249,231	249,092	139

¹ International $\frac{1}{4}$ -inch log rule.

² Rough wood basis.

³ Less than 0.5 M standard cords.

⁴ Includes house logs, shingle logs and bolts, and specialty logs.

Table 2.--Total saw log receipts of Idaho sawmills by source areas, 1962

Source area	Volume	Percent
	M bd. ft. ¹	
Northern Idaho	1,125,624	72.2
Southern Idaho	384,302	24.6
Western Montana ²	27,896	1.8
Eastern Montana	1,404	.1
Washington	18,387	1.2
Western Wyoming ²	1,213	.1
Total	1,558,826	100.0

¹ International $\frac{1}{4}$ -inch log rule.

² West of the Continental Divide.

Table 3.--Sawmill log receipts from Idaho timberlands by species, subunits, and county of origin, 1962

Subunit and county	Species										All species	
	Ponderosa : pine	White : pines ¹	Lodgepole : pine	Douglas- fir	True : firs ²	Engelmann : spruce	Western : larch	Other : species ³	Volume	Percent		
	Thousands of board feet, International $\frac{1}{4}$ -inch log rule ⁴											

NORTHERN												
Benewah	1,288	7,161	0	18,519	32,387	112	8,747	3,711	71,925	4.6		
Bonner	5,825	21,771	224	24,390	15,793	5,142	16,682	20,290	110,117	7.1		
Boundary	1,580	11,171	573	9,108	11,283	18,861	9,934	10,206	72,716	4.7		
Clearwater	9,157	117,703	77	53,624	92,124	6,761	11,467	52,114	343,027	22.2		
Idaho ⁵	53,379	18,206	535	55,407	51,041	11,441	15,281	9,172	214,462	13.9		
Kootenai	7,195	20,095	31	19,279	25,744	495	19,036	13,330	105,205	6.8		
Latah	4,126	4,197	112	15,311	21,725	36	8,529	3,784	57,820	3.7		
Lewis, Nez Perce	16,445	0	1,040	12,551	7,748	2,025	5,968	0	45,777	3.0		
Shoshone	1,939	41,453	168	25,702	40,321	2,071	15,966	11,978	139,598	9.0		
Total, Northern	100,934	241,757	2,760	233,891	298,166	46,944	111,610	124,585	1,160,647	75.0		
Percent of total	8.7	20.8	0.2	20.2	25.7	4.1	9.6	10.7	100.0			
SOUTHERN												
Adams, Washington	41,964	0	513	28,504	19,178	4,411	1,277	0	95,847	6.2		
Bannock, Bear Lake, Caribou, Franklin, Power	0	0	616	3,807	63	1,298	0	0	5,784	0.4		
Blaine, Butte, Camas, Custer	40	0	150	8,189	121	184	0	349	9,033	0.6		
Boise, Gem	82,413	0	770	39,599	18,134	4,508	1,914	0	147,338	9.5		
Bonneville, Clark, Fremont, Madison, Teton	4,005	45	12,118	3,294	1,359	697	150	1	21,669	1.4		
Cassia, Twin Falls	0	0	31	40	112	0	0	117	300	(^e)		
Elmore	26,611	0	158	17,043	3,211	881	375	0	48,279	3.1		
Idaho, ⁵ Lemhi, Valley	15,738	0	16	23,318	6,287	12,399	679	0	58,437	3.8		
Total, Southern	170,771	45	14,372	123,794	48,465	24,378	4,395	467	386,687	25.0		
Percent of total	44.2	(^e)	3.7	32.0	12.5	6.3	1.2	0.1	100.0			
STATE TOTAL												
Percent of total	271,705	241,802	17,132	357,685	346,631	71,322	116,005	125,052	1,547,334	100.0		
	17.6	15.6	1.1	23.1	22.4	4.6	7.5	8.1	100.0			

¹ Practically all western white pine, but includes a small amount of limber pine.² Grand, white, and subalpine firs.³ Includes western hemlock (33,765 M bd. ft.), western redcedar (90,811 M bd. ft.), and small amounts of cottonwood and other hardwoods.⁴ Scribner log rule volumes can be approximated by multiplying table volumes by 0.89.⁵ Idaho County is divided by the Salmon River and lies partly in each subunit.⁶ Less than 0.05 percent.

Table 4.--Output of timber products in Idaho by species, 1962

Product	Species											Total	Percent
	Thousand cubic feet												
	Ponderosa: pine	White pines ¹	Lodgepole: pine	Douglas- fir	True firs ²	Engelmann: spruce	Western: larch	Western: redcedar	Other species ³				
Saw logs	43,356	35,547	2,806	55,056	51,923	10,972	17,141	13,349	5,042	235,192	94.4		
Veneer logs	236	684	1	272	470	424	529	132	49	2,797	1.1		
Pulpwood (round)	0	982	0	0	1,623	458	280	0	1,554	4,897	2.0		
Poles	0	0	57	0	0	0	173	2,443	0	2,673	1.1		
Mine timbers (round)	0	0	45	94	7	0	77	0	0	223	.1		
Miscellaneous industrial wood	0	0	0	0	0	0	0	100	16	124	(*)		
Posts, fuelwood, miscellaneous farm timbers	306	0	627	1,326	0	140	307	612	7	3,325	1.3		
Total	43,898	37,221	3,536	56,748	54,023	11,994	18,507	16,636	6,668	249,231	100.0		
Percent of total	17.6	14.9	1.4	22.8	21.7	4.8	7.4	6.7	2.7	100.0			

¹ Practically all western white pine, but includes a small amount of limber pine.² Grand, white, and subalpine firs.³ Includes western hemlock, cottonwood, and other hardwoods.⁴ Less than 0.05 percent.

Table 5.--Output of timber products by land ownership classes, Idaho, 1962

Product	Total volume	Land ownership classes							All ownships		
		National Forest		Other public		Forest industry				Other private	
		lands	:	lands	:	lands	lands ¹	:		lands	:
<hr/>											
	M cu. ft.							Percent			
Saw logs	235,192	45.8		12.7		23.7		12.2		94.4	
Veneer logs	2,797	.5		.1		.5		(²)		1.1	
Pulpwood (round)	4,897	.7		.3		.9		(²)		2.0	
Poles	2,673	.5		.2		.3		.1		1.1	
Mine timbers (round)	223	.1		(²)		0		(²)		.1	
Miscellaneous industrial wood	124	(²)		(²)		(²)		(²)		(²)	
Posts, fuelwood, miscellaneous farm timbers	3,325	.6		.2		.3		.2		1.3	
Total	249,231	48.2		13.5		25.7		12.6		100.0	

¹ Lands owned by companies or individuals operating wood-using plants.² Less than 0.05 percent.

Table 6.--Round and sawed timbers and lumber received at mines
in northern and southern Idaho, 1962

Subunit	Round timbers	Sawed timbers and lumber
	M cu. ft.	M bd. ft.
Northern Idaho	170	18,946
Southern Idaho	53	2,033
Total	223	20,979

Table 7.--Lumber production and numbers of active sawmills by sawmill size classes in
Idaho, 1956 and 1962

Sawmill size class (M bd. ft. per year):	1956 ¹			1962		
	Lumber production	Active mills		Estimated lumber production ²	Active mills ³	
	MM bd. ft. ⁴	Percent	Number	MM bd. ft. ⁴	Percent	Number
Less than 500	16	1	139	9	1	54
500 to 999	17	1	27	17	1	16
1,000 to 4,999	210	13	80	111	7	53
5,000 to 9,999	200	12	28	195	13	28
10,000 and over	1,166	73	37	1,184	78	42
Total	1,609	100	311	1,516	100	193

¹ Wilson, Alvin K. Idaho lumber production, 1956. Intermountain Forest and Range Expt. Sta. Forest Survey Release 1, 8 pp., illus. 1958.

² Estimated from U.S. Census Bureau's lumber production total for Idaho's 1962 production (1,516 million board feet, lumber tally) on the assumption that lumber production was distributed among sawmill size classes in the same proportion as their reported saw log receipts.

³ Mill size class estimated from saw log receipts rather than from lumber production.

⁴ Lumber tally.

Table 8.--Output of timber products in Idaho, and percentages of totals for major products, 1952, 1956, and 1962

Product	1952 ¹		1956 ²		1962	
	Output	Percent ³	Output	Percent ³	Output	Percent ³
Saw logs . . . M bd. ft. ⁴	1,155,998	74	1,873,700	84	1,547,334	94
Veneer logs . M bd. ft. ⁴	8,525	1	(⁵)	(⁵)	19,030	1
Pulpwood . . . M std. cds. ⁶	156	6	227	5	66	2
All other ⁷ . . M cu. ft.	46,043	19	37,790	11	6,345	3
Total converted to . . . M cu. ft.	241,677	100	327,907	100	249,231	100

¹ U.S. Forest Service. Timber resources for America's future. U.S. Dept. of Agr. Forest Resource Rpt. 14, 713 pp., illus. 1958. (Table 13, pp. 526-527.)

² Wilson, Alvin K. Timber resources of Idaho. Intermountain Forest and Range Expt. Sta. Forest Survey Release 3, 42 pp., illus. 1962. Also, Intermountain Station file data for 1956 products surveys.

³ Based on cubic foot volume equivalents for products whose outputs are shown in other standard volume units.

⁴ International $\frac{1}{4}$ -inch log rule.

⁵ Veneer logs data have been included with data for saw logs to avoid disclosing operations of the two veneer plants that were operating in 1956.

⁶ Rough wood basis. Includes round pulpwood only; i.e., does not include pulpwood from sawmill and veneer plant residues.

⁷ Includes commercial poles, round mine timbers, miscellaneous industrial wood, posts, fuelwood, and miscellaneous farm timbers.

Table 9.--Idaho lumber production, 1952-1962

Year	Quantity
	MM bd. ft. (lumber tally)
1952	1,106
1953	1,101
1954	1,399
1955	1,413
1956	1,608
1957	1,277
1958	1,437
1959	1,802
1960	1,405
1961	1,467
1962	1,516

Source: U.S. Bureau of the Census

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